



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,652	10/22/2003	Clemens Auschra	CO/21-21950/A/CIP	5861
7590 09/07/2005			EXAMINER	
JoAnn Villamizar Ciba Specialty Chemicals Corporation 540 White Plains Road P.O. Box 2005 Tarrytown, NY 10591-9005			SHOSHO, CALLIE E	
			ART UNIT	PAPER NUMBER
			1714	
DATE MAILED: 09/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,652

Applicant(s)

AUSCHRA ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/869,549.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/26/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 3, which depends on claim 1, recites “wherein difference in polarity is obtained by copolymerizing polymer blocks A and B with different amounts of functional groups” while claim 1 also recites “wherein difference in polarity is obtained by copolymerizing polymer blocks A and B with different amounts of functional groups”. Thus, claim 3 fails to further limit the scope of the claim on which it depends, namely, claim 1, given that claim 3 recites the same limitation as claim 1.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7 and 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claim 7 recites "amidosulfonic acid derivatives". The scope of the claim is confusing because it is not clear what is meant by "derivatives" or what compounds this phrase encompasses.

(b) Claim 16 is drawn to "process of preparing a pigment dispersion composition according to claim 1". However, the scope of the claim is confusing given that claim 1 is drawn to a composition not a pigment dispersion composition.

Similar confusion arises with respect to the scope of claim 18 which also recites "pigment dispersion composition according to claim 1". Given that claim 1 is drawn to a composition not a pigment dispersion composition, it is not clear what is being claimed. Clarification is requested.

(c) Claim 17 is drawn to method which comprises "incorporating the pigment dispersion according to claim 1 therein". The scope of the claim is confusing given that claim 1 is drawn to a composition not a pigment dispersion.

(d) Claim 17, which depends on claim 1, recites the limitation "the pigment dispersion" in line 2. There is insufficient antecedent basis for this limitation in the claim given that there is no disclosure of pigment dispersion in claim 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
6. Claims 1-7, 11-12, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Percec (U.S. 5,886,118).

Percec discloses composition comprising pigment and block copolymer obtained from acrylonitrile and co-monomer such as (meth)acrylic acid. The block polymer is prepared by copolymerizing, by living polymerization, the acrylonitrile and (meth)acrylic acid in the presence of initiator and catalyst wherein the initiator includes aryl sulfonyl halide and halopropionitrile and then replacing the halogen of the initiator with polymer chain terminal group. The composition also comprises dyes and stabilizers (col.1, lines 27-47, 55-63, and 65,

col.3, lines 1-2, col.4, lines 1-2 and 19-23, col.6, lines 27-35, and col.6, line 52-col.7, line 40).

Although there is no structure or formula for the block copolymer disclosed by Percec, given that the block is produced by process identical to that presently claimed including using initiator identical to that presently claimed, it is clear that the block would intrinsically possess presently claimed formula.

The difference between Percec and the present claimed invention is the requirement in the claims of (a) amount of block polymer and pigment and (b) difference in the amount of functional groups between the two blocks of the copolymer.

With respect to difference (a), Percec discloses composition comprising the above block polymer and pigment, however, there is no disclosure of the amount of block copolymer or pigment present in the composition. It would have been within the skill level of one of ordinary skill in the art to choose amounts of block copolymer and pigment depending on the desired properties, i.e. viscosity, color, etc. and end use, i.e. ink, coating, etc., of the composition.

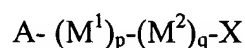
In light of the above and given the broad range of block polymer and pigment presently claimed, i.e. 0.1-99.99% each, it therefore would have been obvious to one of ordinary skill in the art to choose amounts of block polymer and pigment, including those presently claimed, and thereby arrive at the claimed invention.

With respect to difference (b), Percec discloses block copolymer prepared from acrylonitrile and (meth)acrylic acid. Thus, the two blocks obtained from these monomers will clearly possess different amounts of functional groups given that one monomers contains little if any functional groups, i.e. acrylonitrile, while the other monomers necessarily possess certain amount of functional monomers, i.e. meth(acrylic) acid.

Although there is no explicit disclosure of the amount of functional monomers in each block, given that the functional groups disclosed by Percec, i.e. carboxyl groups, would effect the properties of the polymer such as water-solubility, it therefore would have been obvious to one of ordinary skill in the art to choose amounts of functional monomers present, including those presently claimed, in order to control the properties of the polymer, and thereby arrive at the claimed invention.

7. Claims 1-7 and 9-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matyjaszewski et al. '937 (U.S. 5,807,937) in view of either Pearlstine et al. (U.S. 6,087,416) or Kappele et al. (U.S. 6,063,834).

Matyjaszewski et al. '937 disclose composition comprising block copolymer produced by ATRP wherein the block copolymer has the structure:



wherein A is residue from initiator where the initiators include alkyl halide and aralkyl halide, M^1 and M^2 are each obtained from monomers such as (meth)acrylic acid, (meth)acrylates, and acrylonitrile, and X is halide. It is disclosed that the blocks which comprise the copolymer are obtained from both polar and non-polar monomers. It is further disclosed that the X group is usually replaced with other functional group including polymer chain terminal group. The block copolymer is produced by copolymerizing, by ATRP, fragments M^1 and M^2 in presence of initiator identical to that presently claimed and catalyst and then replacing the halogen of the

imitator with different polymer chain terminal group (col.1, lines 9-12, col.6, lines 5-11 and 27-29, col.8, lines 18-20 and 47-58, col.14, lines 31-50, col.16, line 46-col.17, line 61, col.26, line 66-col.27, line 1, col.26, lines 5-24, col.27, lines 6-19, and col.39, lines 16-25).

The difference between Matyjaszewski et al. '937 and the present claimed invention is the requirement in the claims that (a) the composition contains pigment, liquid carrier, binder, and other additives and (b) difference in the amount of functional groups between the two blocks of the copolymer.

With respect to difference (a), Matyjaszewski et al. '937 disclose that the above described block copolymer is used in inks, but does not explicitly disclose components which are present in such inks.

However, it is well known that inks typically comprise liquid carrier, pigment, dispersant, binder, etc. Evidence to support this position is found in either Pearlstine et al. or Kappel et al.

Pearlstine et al. disclose ink that comprises 1-15% inorganic or organic pigment, 0.1-25% block copolymer dispersant, 11-16% binder, liquid carrier comprising water and solvent, and additives such as surfactant wherein the dispersant is used to disperse the pigment particles in the liquid carrier and then the pigment dispersion is combined with the other ingredients including binder (col.2, lines 15-32, col.3, lines 28-37 and 63-64, col.4, lines 12-18, and col.7, lines 1-36 and 38-42). Alternatively, Kappel et al. disclose ink comprising 2-50% binder, 0.2-15% pigment including inorganic and organic pigments such as anthraquinones, quinacridones, and carbon black, 0.5-7% block copolymer dispersant, solvent, and additives such as surfactant wherein the dispersant is used to disperse the pigment particles in the liquid carrier and then the pigment dispersion is combined with the other ingredients including binder (col.2, lines 11-13,

Art Unit: 1714

col.4, lines 24-29 and 45-46, col.5, lines 50-51, col.6, lines 13-34, col.6, line 56-col.7, line 2, and col.7, line 7).

In light of the disclosure of Matyjaszewski et al. '937 that the ATRP block copolymers are used in inks and given the disclosure of either Pearlstine et al. or Kappeler et al. that inks typically contain pigment, dispersant, liquid carrier, binder, and additives as described, it therefore would have been obvious to one of ordinary skill in the art that ink composition of Matyjaszewski et al. '937 would intrinsically possess such ingredients, and thus, one of ordinary skill in the art would have arrived at the claimed invention.

With respect to difference (b), Matyjaszewski et al. '937 disclose block copolymer prepared from monomers M^1 and M^2 which can each be (meth)acrylic acid, (meth)acrylates, acrylonitrile, etc. Thus, the two blocks obtained from these monomers will clearly possess different amounts of functional groups given that one monomers contains little if any functional groups, i.e. (meth)acrylate, while the other monomers necessarily possess certain amount of functional monomers, i.e. meth(acrylic).

Although there is no explicit disclosure of the amount of functional monomers in each block, given that the functional groups disclosed by Matyjaszewski et al. '937, i.e. carboxyl groups, would effect the properties of the polymer such as water-solubility, it therefore would have been obvious to one of ordinary skill in the art to choose amounts of functional monomers present, including those presently claimed, in order to control the properties of the polymer, and thereby arrive at the claimed invention.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matyjaszewski et al. '937 in view of either Pearlstine et al. or Kappel et al. as applied to claims 1-7 and 9-19 above, and further in view of Matyjaszewski et al. '060 (U.S. 6,512,060).

The difference between Matyjaszewski et al. '937 in view of either Pearlstine et al. or Kappel et al. and the present claimed invention is the requirement in the claims of specific monomer used in the block copolymer.

Matyjaszewski et al. '060, which is drawn to block copolymer obtained from ATRP, disclose using glycidyl acrylate to produce polymer given that the resulting copolymer is well defined and given that the glycidyl acrylate remains unaffected by polymerization conditions (col.22, lines 31-32 and 47-49).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use glycidyl acrylate to produce block copolymer of Matyjaszewski et al. '937, and thereby arrive at the claimed invention.

9. Claims 1-7 and 9-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearlstine et al. (U.S. 6,087,416) or Kappel et al. (U.S. 6,063,834) either of which in view of Matyjaszewski et al. '937 (U.S. 5,807,937)

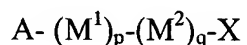
Pearlstine et al. disclose ink that comprises 1-15% inorganic or organic pigment, 0.1-25% block copolymer dispersant, 11-16% binder, liquid carrier comprising water and solvent, and additives such as surfactant wherein the dispersant is used to disperse the pigment particles in the liquid carrier and then the pigment dispersion is combined with the other ingredients including

binder (col.2, lines 15-32, col.3, lines 28-37 and 63-64, col.4, lines 12-18, and col.7, lines 1-36 and 38-42).

Alternatively, Kappel et al. disclose ink comprising 2-50% binder, 0.2-15% pigment including inorganic and organic pigments such as anthraquinones, quinacridones, and carbon black, 0.5-7% block copolymer dispersant, solvent, and additives such as surfactant wherein the dispersant is used to disperse the pigment particles in the liquid carrier and then the pigment dispersion is combined with the other ingredients including binder (col.2, lines 11-13, col.4, lines 24-29 and 45-46, col.5, lines 50-51, col.6, lines 13-34, col.6, line 56-col.7, line 2, and col.7, line 7).

The difference between Pearlstine et al. or Kappel et al. and the present claimed invention is the requirement in the claims of specific type of block copolymer.

Matyjaszewski et al. '937 disclose block copolymer produced by ATRP which has the structure:



wherein A is residue from initiator where the initiators include alkyl halide and aralkyl halide, M^1 and M^2 are each obtained from monomers such as (meth)acrylic acid, (meth)acrylates, and acrylonitrile, and X is halide. It is disclosed that the block which comprise the copolymer are obtained from both polar and non-polar monomers. It is further disclosed that the X group is usually replaced with polymer chain terminal group. The block copolymer is produced by copolymerizing, by ATRP, fragments M^1 and M^2 in presence of initiator identical to that

presently claimed and catalyst and then replacing the halogen of the imitator with different polymer chain terminal group The block copolymers are suitable for use in inks (col.1, lines 9-12, col.6, lines 5-11 and 27-29, col.8, lines 18-20 and 47-58, col.14, lines 31-50, col.16, line 46- col.17, line 61, col.26, lines 5-24, col.26, line 66-col.27, line 1, col.27, lines 6-19, and col.39, lines 16-25).

Matyjaszewski et al. '937 disclose block copolymer prepared from monomers M^1 and M^2 which can each be (meth)acrylic acid, (meth)acrylates, acrylonitrile, etc. Thus, the two blocks obtained from these monomers will clearly possess different amounts of functional groups given that one monomers contains little if any functional groups, i.e. (meth)acrylate, while the other monomers necessarily possess certain amount of functional monomers, i.e. meth(acrylic). Although there is no explicit disclosure of the amount of functional monomers in each block, given that the functional groups disclosed by Matyjaszewski et al. '937, i.e. carboxyl groups, would effect the properties of the polymer such as water-solubility, it therefore would have been obvious to one of ordinary skill in the art to choose amounts of functional monomers present, including those presently claimed, in order to control the properties of the polymer.

The motivation for using such block copolymer is that the polymers exhibit low polydispersity and are well-defined and uniform (col.5, lines 57-64, col.38, lines 59-63, and col.39, lines 6-8).

In light of the motivation for using ATRP block copolymer disclosed by Matyjaszewski et al. '937 as described above, it therefore would have been obvious to one of ordinary skill in the art to use such block copolymer in the composition of either Pearlstine et al. or Kappele et al., and thereby arrive at the claimed invention.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pearlstine et al. or Kappele et al. either of which in view of Matyjaszewski et al. '937 as applied to claims 1-7 and 9-19 above, and further in view of Matyjaszewski et al. '060 (U.S. 6,512,060).

The difference between Pearlstine et al. or Kappele et al. either of which in view of Matyjaszewski et al. '937 and the present claimed invention is the requirement in the claims of specific monomer used in the block copolymer.

Matyjaszewski et al. '060, which is drawn to block copolymer obtained from ATRP, disclose using glycidyl acrylate to produce polymer given that the resulting copolymer is well defined and given that the glycidyl acrylate remains unaffected by polymerization conditions (col.22, lines 31-32 and 47-49).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use glycidyl acrylate to produce block copolymer of Pearlstine et al. or Kappele et al., and thereby arrive at the claimed invention.

11. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spinelli (U.S. 5,772,741) in view of Matyjaszewski et al. '060 (U.S. 6,512,060).

Spinelli discloses composition, i.e. ink, comprising water, organic solvent, 1-15% pigment including organic or inorganic pigment such as silica or alumina, 0.1-10% block copolymer dispersant obtained from living polymerization, and other additives including dye and stabilizer (col.1, lines 10-12, col.2, lines 15-21, col.3, lines 13-14, 38-45, 56-67, and col.4, lines 33-35 and 66).

The difference between Spinelli and the present claimed invention is the requirement in the claims of specific block copolymer.

Matyjaszewski et al. '060 disclose block copolymer obtained from hydrophilic monomer and hydrophobic monomer such a hydroxyethyl acrylate, dimethylaminoethyl methacrylate, butyl acrylate, and glycidyl acrylate. The block polymer is prepared by copolymerizing, by ATRP, the monomers in the presence of initiator and catalyst wherein the initiator includes halopropionates and 2-halopropionitrile and then replacing the halogen of the initiator with polymer chain terminal group. The motivation for using such block copolymer is that the block copolymer possesses highly controlled molecular weight distribution and highly controlled functionality (col.4, lines 25-44 and 65, col.5, lines 7-38, col.11, lines 18-37, col.20, lines 22-27, col.22, lines 39-40 and 47, col.24, lines 27-40, col.25, lines 20-33 and 62-67). Although there is no structure or formula for the block polymer disclosed by Matyjaszewski et al. '060, given that the block is produced by process identical to that presently claimed including using initiator identical to that presently claimed, it is clear that the block would intrinsically possess presently claimed formula.

Matyjaszewski et al. '060 disclose block copolymer prepared from hydrophilic monomer such as hydroxyethyl acrylate or dimethylaminoethyl methacrylate and hydrophobic monomer such as butyl acrylate, etc. Thus, the two blocks obtained from these monomers will clearly possess different amounts of functional groups given that one monomers contains little if any functional groups, i.e. butyl acrylate, while the other monomers necessarily possess certain amount of functional monomers, i.e. hydroxyethyl acrylate or dimethylaminoethyl methacrylate. Although there is no explicit disclosure of the amount of functional monomers in each block,

given that the functional groups disclosed by Matyjaszewski et al., i.e. hydroxyl groups or amino groups, would effect the properties of the polymer such as water-solubility, it therefore would have been obvious to one of ordinary skill in the art to choose amounts of functional monomers present, including those presently claimed, in order to control the properties of the polymer.

In light of the motivation for using specific block copolymer disclosed by Matyjaszewski et al. '060 as described above, it therefore would have been obvious to one of ordinary skill in the art to use such block copolymer in the ink of Spinelli in order to produce ink with desired properties, and thereby arrive at the claimed invention.

12. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spinelli in view of Matyjaszewski et al. '060 as applied to claims 1-17 above, and further in view of Zhu (U.S. 5,889,083).

The difference between Spinelli in view of Matyjaszewski et al. '060 and the present claimed invention is the requirement in the claims of binder.

Zhu, which is drawn to ink, disclose the use of film-forming binder in order to fix colorant to substrate and provide protection against abrasion (col.4, lines 47-54).

In light of the motivation for using binder disclosed by Zhu as described above, it therefore would have been obvious to one of ordinary skill in the art to use binder in the ink of Spinelli in order to produce ink with good smudge resistance and abrasion resistance, and thereby arrive at the claimed invention.

Art Unit: 1714

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

WO 99/0398, EP 218436, EP 329873, EP 518225, EP 323181, EP 962473, and Madeleine et al. (U.S. 4,925,765) each disclose block copolymer formed using group transfer polymerization, however, none of the references disclose initiator as presently claimed.

Olson et al. (U.S. 6,326,420) and White et al. (U.S. 6,462,125) each disclose pigment dispersion comprising ATRP block copolymer and pigment as presently claimed, however, given the effective filing date, these references cannot be used as prior art under any subsection of 35 USC 102.


WO 97/18247 disclose ATRP block copolymers identical to that presently claimed however, there is no disclosure of composition which comprises such copolymer and pigment.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
9/3/05